



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/031,868

07/02/2002

Jacob Wohlstadter

090900-0112

1273

26371 7590 06/25/2008

FOLEY & LARDNER LLP
777 EAST WISCONSIN AVENUE
MILWAUKEE, WI 53202-5306

EXAMINER

SINES, BRIAN J

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

06/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JACOB WOHLSTADTER,
JUE ZHANG, DAVID GAMBREL,
SERGEY IVANOV, JOHN LILJESTRAND
AND CHARLES QUENTIN DAVIS

Appeal 2008-3502
Application 10/031,868
Technology Center 1700

Decided: June 24, 2008

Before EDWARD C. KIMLIN, LINDA M. GAUDETTE, and
MICHAEL P. COLAIANNI, *Administrative Patent Judges*.

KIMLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 66-94. Claim 66 is illustrative:

66. An apparatus for the conduct of electrochemiluminescence measurements comprising:

a cell having at least one cell wall which includes a transparent portion adjacent to an ECL chamber defined within said cell;

a working electrode abutting said ECL chamber and in optical registration with said transparent portion;

a counter electrode abutting said ECL chamber; and

a heater, thermally coupled to said working electrode, for adjusting a temperature of said working electrode.

The Examiner relies upon by the following references in the rejection of the appealed claims:

Ghaed	5,466,416	Nov. 14, 1995
Liljestrand	6,200,531 B1	Mar. 13, 2001

Appellants' claimed invention is directed to an apparatus for conducting electrochemiluminescence measurements. The apparatus comprises, inter alia, a working electrode abutting an ECL chamber and a heater thermally coupled to either the working electrode (claim 66) or a surface of the ECL chamber (claim 72).

Appealed claims 66-94 stand rejected under the judicially-created doctrine of obviousness-type double patenting over claims 1-4 of Liljestrand in view of Ghaed.

Appellants do not set forth the separate arguments for claims 67, 71-78 and 85-94. Accordingly, these claims stand or fall together with the independent claims upon which they ultimately depend.

We have thoroughly reviewed each of Appellants' arguments for patentability. However, we find that the Examiner's rejection is well founded and supported by the evidence relied upon. Accordingly, we will

sustain the Examiner's rejection for essentially those reasons expressed in the Answer, and we add the following for emphasis only.

There is no dispute that claims 1-4 of Liljestrand recite an apparatus for conducting electrochemiluminescence measurements comprising the presently claimed (a) a cell having at least one cell wall which includes a transparent portion adjacent to an ECL chamber defined within said cell, (b) a working electrode abutting said ECL chamber and in optical registration with said transparent portion, and (c) a counter electrode abutting said ECL chamber. As recognized by the Examiner, the patent claims do not recite a heater that is thermally coupled to either the working electrode or one surface of the ECL chamber.

As acknowledged by Appellants, "an obviousness-type double patenting rejection is analogous to an obviousness rejection based on 35 U.S.C. § 103" (Br. 8, last para.). Appellants also agree with the Examiner that portions of the patent Specification which provides support for the patented claims may be considered in the determination of whether the claims of an application define an obvious variation of an invention claimed in a patent (Br. 9, second sentence).

In applying these fundamental principles governing obviousness-type double patenting rejections, we find ourselves in complete agreement with the Examiner that Ghaed evidences the obviousness of incorporating "the use of a heater associated with either the working electrode or surface of the chamber proximal to the working electrode as claimed to facilitate effecting heating and temperature control for the disclosed device" (Ans. 4, last sentence). Ghaed expressly teaches that the electrochemiluminescence process is sensitive to the temperature of the sample being tested and,

therefore, Ghaed employs a sample fluid heater system that is coupled to the flow cell comprising the working electrode and ECL chamber. Ghaed discloses that the apparatus "serves both to adjust the temperature of the electrochemiluminescent fluid sample as well as to adjust measured values of the light based on the actual temperature of the electrochemiluminescent fluid sample in the flow cell 50" (col. 6, ll. 50-53). The reference further teaches that the sample fluids supplied to the flow cell are under temperature control prior to the conduct of the ECL test.

Hence, contrary to Appellants' argument, it is not necessary to resort to Appellants' Specification to arrive at the legal conclusion that it would have been obvious for one of ordinary skill in the art to include a heater in the claimed apparatus of Liljestrand to control the temperature of the sample fluids subject to the ECL test. Also, Liljestrand's Specification in support of the patent claims discloses that the electrochemiluminescence process occurs at the working electrode when testing assay samples. Accordingly, we find no merit in Appellants' argument that "[t]he fact that the ECL process occurs at the working electrode is not necessary to construct the claimed apparatus, or understand the scope of the claims" (Br. 11, last para.). Manifestly, it cannot be gainsaid that it is necessary for one of ordinary skill in the art to understand how a claimed apparatus operates in order to assess the scope of the claims defining the apparatus.

Appellants also maintain that the Examiner's interpretation of the claim language "thermally coupled" does not accurately reflect the present invention since the Specification states that "[h]eater 216 may be thermally coupled *directly* to a surface of ECL chamber 139" (Spec. at 29, emphasis added). However, we agree with the Examiner's response that the appealed

claims do not require any **direct** coupling between the heater and either the working electrode or the ECL chamber. The indirect coupling disclosed by Ghaed meets the requirement of the claims on appeal. Moreover, Appellants' Specification disclosure that the heater **may** be thermally coupled directly to the surface of the ECL chamber or working electrode would be reasonably interpreted as a disclosure that the thermal coupling may also be indirect.

As for separately argued claims 68-70 and 79-84, we find that it would have been obvious for one of ordinary skill in the art to employ the heater disclosed by Ghaed for controlling the temperature in the various manners recited in the claims. As observed by the Examiner, the claims impart no particular structure to the recited heater.

As a final point, we note that Appellants base no argument upon objective evidence of nonobviousness, such as unexpected results.

In conclusion, based on the foregoing and the reasons well stated by the Examiner, the Examiner's decision rejecting the appealed claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(effective Sept. 13, 2004).

AFFIRMED

cam

Appeal 2008-3502
Application 10/031,868

FOLEY & LARDNER LLP
777 EAST WISCONSIN AVENUE
MILWAUKEE, WI 53202-5306